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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/683,947

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Michael Alan Meek

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05/03/2007

TYCO ENGINEERED PRODUCTS & SERVICES
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EXAMINER

YIP, WINNIE S

ART UNIT

PAPER NUMBER

3636

MAIL DATE

DELIVERY MODE

05/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/683,947	Applicant(s) MEEK ET AL.	
	Examiner Winnie Yip	Art Unit 3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's amendment filed on January 12, 2007.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

In response to the interview on February 15, 2007, after further search and consideration, the amendment filed on January 12, 2007 is considered unpatentable in view of newly discovered references as cited bellow and the rejection as indicated bellow.

Claim Rejections - 35 USC § 103

1. Claims 1-3 and 5-6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Herren et al. (US Patent (No. 5,189,857) in view of Rice (US Patent No. 6,418,682).

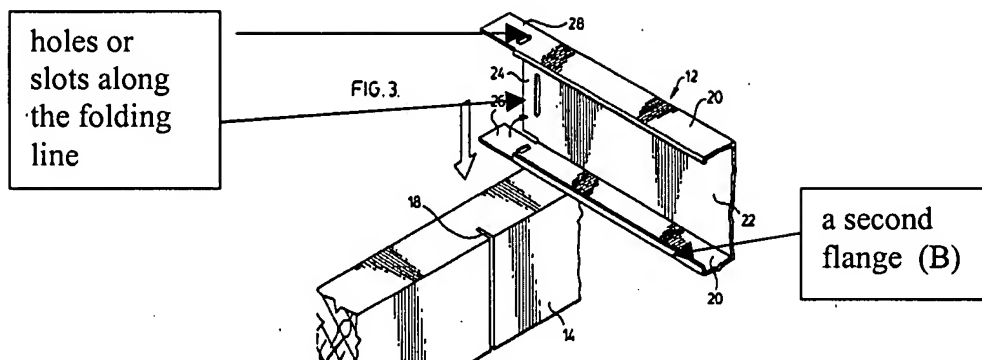
Herren et al. show and teach a frame system comprising: a plurality of substantial U-shaped studs (30) each having a longitudinally extending body (38) and opposing first flanges (40, 42) extending outwardly from the body at approximately an angle of 90 degrees, and opposing foldable end flaps (44, 50) being folded outwardly from the body at approximately an angle of 90 degrees, a plurality of U-shaped tracks (12, 14), each track having a longitudinally extending track body (16) and opposing track flanges (18, 20) extending outwardly from the track body at an angle approximately 90 degrees, the longitudinally extending track body having fastening holes (including at least one hole) at the respective mounting locations of each of the studs, each stud being mounted between the pair of tracks by fasteners (58) passed through the holes of the track bodies and the end flaps of the stud, wherein the studs (3) and the tracks (12, 14) are each formed from a single sheet of steel with a galvanized coating (see col. line 67). Herren et al. do not specifically define the studs (30) having opposing second flanges extending

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outwardly from the opposing first flanges at an approximately 90 degrees as claimed.

However, Rice teaches a frame system comprising a plurality of U-shaped studs (12) being mounted between two elongate support members (14), wherein the stud (12) having opposing first flanges (20) extending from a longitudinally extending body (22), and second flanges (B) extending from the first flanges at an angle approximately 90 degrees for increasing the rigidity of the flanges of the stud. It would have been obvious to one ordinary skill in the art, at the time the invention was made, to modify the frame system of Herren et al. having the studs (30) being formed with additional second opposing flanges formed on the first flanges (40, 42) as taught by Rice as old and well known in the art, for increasing rigidity and tensile strength of the metal stud to as claimed. Further, Herren et al. do not specifically define each stud having the opposing end flaps forming a plurality of holes or openings positioned linearly and extending transversely across the body of the stud as claimed. However, Rice also teaches the opposing end flaps (24, 26, 28) of the stud having easier holes or slots (30, 32) (only one show) cut into the body of the stud along a bend line extending transversely across the body of the stud for helping easier to fold the end flaps of the stud (see col. 3, lines 8-18). It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the frame system of Herren et al. having the stud formed with a plurality of holes or slots positioned align linearly and extending transversely across a body of a stud as taught by Rice, as a generally practice, to define a bend line for easily folding an end of the an elongate member to form a flap thereon to easily assemble the frame system.

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2. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herren et al. (US Patent (No. 5,189,857) in view of Rice (US Patent No. 5,189,857) as applied to claims 1 and 5 above, and further in view of Josey (US Patent No. 6,023,898).

Although Herren et al. or Rice do not specifically define the frame system having the pair of vertical tracks being disposed to have the opposing track flanges of the pair of tracks extending toward each other, and the end flaps of the studs being mounted between the tracks as claimed, Josey teaches a frame system comprising a pair of U-shaped tracks (12, 14) each having opposing flanges (40, 42; 34, 36;), wherein the opposing flanges (40, 42) of one track (12) being arranged facing toward the opposing flanges (34, 36) of the other track (14), and a plurality of U-shaped studs (10) each having opposite end flaps (28, 26) being mounted to the respective longitudinally extending bodies (38, 32) of tracks by adhesive tapes (46, 44) for supporting the pair of tracks spaced apart each other. It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the framing system of Herren et al. as modified by Rice having the pair vertical tracks being alternatively disposed to

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have the opposing flanges of the pair of tracks extending facing toward each other, and therefore, the studs each having end flaps being mounted between the pair of tracks as taught by Josey to have the flanges of tracks providing support to the studs therebetween without slipping outwardly to accommodate various application.

3. Claims 1-3, 5-6, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daudet et al. (US Patent No. 6,301,854) in view of Rice (US Patent No. 6,418,682).

Daudet et al. show and teach a frame system comprising: a plurality of studs (400) each having a longitudinally extending body (402) and opposing first flanges (404, 406) extending outwardly from the body at approximately an angle of 90 degrees, opposing second flanges (410) extending outwardly from the opposing first flanges at approximately an angle of 90 degrees, and opposing foldable end flaps (30d) being folded outwardly from the body at approximately an angle of 90 degrees, a plurality of U-shaped tracks (40), each track having a longitudinally extending track body (42) and opposing track flanges (44) extending outwardly from the track body at an angle approximately 90 degrees, the longitudinally extending track body having at least one fastening hole at the respective mounting locations of each of the studs, each stud (400) having the foldable end flaps (408) mounted to the longitudinal extending bodies of the pair of tracks by fasteners passed through the holes (412) of the track bodies and the end flaps of the stud, wherein the studs (400) and the tracks (40) are each formed from a single sheet of steel. Although Daudet et al. do not specifically define each stud having the opposing end flaps forming a plurality of holes or openings positioned linearly and extending transversely across the body of the stud as claimed, however, Rice also teaches the opposing end flaps (24, 26, 28) of

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the stud having easier holes or slots (30, 32) (only one show) cut into the body of the stud along a bend line extending transversely across the body of the stud for helping easier to fold the end flaps of the stud (see col. 3, lines 8-18). It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the frame system of Daudet et al. having the stud formed with a plurality of holes or slots positioned align linearly and extending transversely across a body of a stud as taught by Rice, as a generally practice, to define a bend line for easily folding an end of the an elongate member to form a flap thereon to easily assemble the frame system.

Regarding claims 8 and 9, Daudet et al. further teaches the framing system comprising the tracks being arranged between a pair of U-shaped tracks (20), wherein the pair of U-shaped tracks (20) having opposing flanges (24, 26) being disposed facing toward each other, and two ends of the tracks (40) being mounted to the longitudinal extending bodies of the pair of tracks (20). It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the framing system of Daudet et al. having at least one pair of tracks (40) being alternatively disposed to have the opposing flanges extending outwardly facing each other, and the studs (400), therefore, have the end flaps (408) mounted to the longitudinal extending bodies of the pair tracks (40) such that the flanges of the pair of tracks forming a channel to provide a strongly support to the studs therebetween as an obvious practice to achieve desirable result as need for variety applications.

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4. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herren et al. '857 or Daudet et al. '854 in view of Rice '682 as applied to claims 1-3 or 5-6 above, and further in view of Baltimorean (US Patent No. 5,411,812).

The claims are considered to be met by the forgoing combined references as explained and applied set forth above rejections except that either Herren et al. or Daudet et al. or Rice does not define the tracks and studs being made of specific material of a carbon steel being coated with a galvanized zinc layer as claimed. However, Herren et al. discloses the studs and tracks being made of sheet of galvanized steel which is considered to be sheet of steel with a suitable galvanized coating layer. Bilimoria further teaches a steel beam/strip could be made of carbon steel being galvanized with a zinc coating as claimed. It would have been obvious to one ordinary skill in the art, at the time the invention was made, to modify the frame system of Herren et al. for Daudet et al. combined with Rice having the tracks and the studs being made of specific metal such as a carbon steel with a galvanized zinc coating layer as an obvious matter of design choice taught by Bilimoria for taking advantage of high tensile strength of the structure for particular advantage since they are rigid and easily formed according to technology which is known per se into complex and intricate shapes and configurations.

Response to Argument

5. Applicant's arguments filed January 12, 2007 with respect to the rejections under 35 U.S.C. 102/103 to Horton et al. has been fully considered and are persuasive. Therefore, the rejection is withdrawn.

6. Applicant's arguments with respect to the claims as being rejected under 35 U.S.C. 103 to Herren et al. in view of Rice have been fully considered but is not deemed persuasive. In response to applicant's argument that Herren et al. do not define all of the limitations such as does not define the studs having opposed second flanges and do not define the studs each having opposing flaps and having holes or slots positioned linearly and extending transversely across the body of the stud as suggested by the applicant, we agree that this is so, otherwise our rejection would have been entered under section U.S.C. 102 of the statute. However, as discussed in the interview, and as set forth above rejection, Examiner points out above features were taught by other references such as by Rice. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Herren et al. teach the stud (30) being made of single metal sheet (col. 6, lines 67-68) such that the opposing flanges (40, 42) and opposing end flaps (44, 46) are foldable members being formed by bending from the longitudinal extending body (the base surface) (34). In addition, Herren et al. teach the stud (30) includes a plurality of slots (36) being cut to define the flanges and the end flaps for easily bend the flanges and end flaps from the base surface. Whether or not the end flap (46) is a Z-shaped end flap, is not part of the claimed invention. Rice teaches a framing system comprising metal studs being mounted between two elongated support members, the stud being made of metal sheet. Rice teaches the

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stud having a plurality of holes or slots positioned linearly and extending transversely across the body of the stud to allow end portions of the body being folded along the holes and slots to define the end flaps to be mounted to the respective elongated support member. Rice and Herren et al. both teach a framing system in the same constructing field, therefore, for more easily to fold the end flaps, one ordinary skill in the art would have been obvious to modify the stud of Herren et al. to have a plurality of holes or slots formed along a folding line as taught by Rice as old and well known method of folding a metal sheet to form a desirable structure. Therefore, the rejections are appears to be appropriated.

Some more references such as Story '777 and Densent '282 as newly discovered also teach a metal structure having a plurality of holes or slots positioned linearly to allow a foldable member to fold along the holes and slots to form an end flat as an old and known method as claimed.

7. In response to applicant's arguments to the rejections to claims 4 and 7 under 35 U.S.C. 103 and the rejections to claims 8 and 9 under 35 U.S. C. 103 (a) as being unpatentable over the combined references, the argument based on the claim rejection to Herren et al. in view of Rice. Therefore, the arguments with respect to claims 4, 7 and 8-9 are moot based upon the rejection to Herren et al. in view of Rice as discussed above. Therefore, the rejections stand granted.

Citations

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Serban '590 teach a framing system comprising studs formed by flanges and end flaps being folded one direction to form a box stud and mounted between two U-shaped tracks as

similar to the claimed invention. Herren '535 teach various studs being mounted between U-shaped tracks which may be arranged to have the flanges extending toward each other as similar to the claimed invention. Lisula '201 teaches a metal stud as similar to the claimed invention. Story '777 and Densen '282 teach various frame systems comprising metal studs having hold lines formed by a plurality of aligned holes as similar to the claimed invention.

Action Is Made Final

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

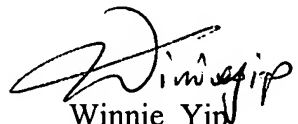
Inquiry Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 571-272-6870. The examiner can normally be reached on M-F (9:30-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Winnie Yip
Primary Examiner
Art Unit 3636

wsy
April 26, 2007